

Title (en)
MONITORING VIDEO CAMERA

Publication
EP 0369585 B1 19930901 (EN)

Application
EP 89309657 A 19890922

Priority
• US 24938588 A 19880926
• US 29396089 A 19890106

Abstract (en)
[origin: EP0369585A1] A video camera includes a mode selecting switch (74) which selectively interconnects one of an external timing signal from a tachometer and signal conditioner (30) and master timing signals from a raster-scan synchronization generator (70) with a sensor line shift timing generator (76). In a time delay and integration mode, the sensor line shift timing generator causes the CCD arrays of an image section and storage section to shift pixel values down the CCD arrays at a rate commensurate with the external timing signal. As a spot of light emanating from a portion of an object moving through an examination region moves along the CCD array, a corresponding pixel charge is shifted through the CCD array at the same speed such that the same pixel charge integrates light from the same spot as it moves the entire length of the CCD array. In a raster-scan mode, the mode selecting switch (74) connects master timing signals from the raster scan sync generator (70) to the sensor line shift timing generator (76) which generates conventional raster-scan timing signals. An output register timing generator (78) generates timing signals under control of an oscillator (80) for output registers such that an output signal is produced that is compatible with a television signal standard. Video processing channels and a video synchronization circuit process the output signals to produce a composite video signal.

IPC 1-7
G01N 21/89; **G06F 15/70**; **H04N 7/18**

IPC 8 full level
H04N 5/225 (2006.01); **G01N 21/89** (2006.01); **H04N 5/253** (2006.01); **H04N 5/372** (2011.01); **H04N 7/18** (2006.01)

CPC (source: EP US)
G01N 21/89 (2013.01 - EP US); **G01N 21/8903** (2013.01 - EP US); **H04N 5/253** (2013.01 - EP US); **H04N 25/711** (2023.01 - EP US);
G01N 2021/8887 (2013.01 - EP US)

Citation (examination)
ELEKTRONIK, vol. 35, no. 24, November 1986, pages 99-102, München, DE; R. BERMBACH et al.: "Zeilensensor überwacht bewegte Objekte"

Cited by
EP0426166A3; GB2298542A; EP0471444A3; EP0766456A1; EP0426182A3; EP0599481A1; US5747825A; EP0624988A1; EP0516543A1;
FR2677207A1; GB2391737A; GB2391737B; WO03039156A1; WO9114173A3; EP0685201A1; FR2720259A1; EP0516449A1; US5278657A;
US9438798B2; WO9634273A1; WO9532579A1; WO2015116493A1; US6891146B2; US6525770B1

Designated contracting state (EPC)
DE FR GB NL

DOCDB simple family (publication)
EP 0369585 A1 19900523; **EP 0369585 B1 19930901**; DE 68908851 D1 19931007; DE 68908851 T2 19931216; JP 3091969 B2 20000925;
JP H02121577 A 19900509; US 4949172 A 19900814

DOCDB simple family (application)
EP 89309657 A 19890922; DE 68908851 T 19890922; JP 24790489 A 19890922; US 29396089 A 19890106